

Preppers Guide for Hantavirus

General Information

- **What is it?** Hantavirus is a group of rodent-borne RNA viruses causing severe lung (HPS) or kidney/bleeding (HFRS) diseases in humans. Caused by inhaling dust w/ mice urine/droppings.
- **Mortality:** HPS ~38% (up to 50%); HFRS 1–15% depending on strain.
- **Symptoms:** Flu-like prodrome (fever, aches, fatigue) → severe lung edema/shock (HPS) or kidney failure/bleeding (HFRS).

Drugs: Supportive ICU care is the only official protocol. Ribavirin useful early in HFRS

- **Ribavirin:** Most studied antiviral. Reduces severity in early HFRS; limited benefit in advanced HPS. Used off-label in endemic areas.
- **Favipiravir (T-705):** Strong preclinical activity (in vitro & hamster models) against hantaviruses; often comparable or synergistic with ribavirin.
- **Hydroxychloroquine / Chloroquine:** In vitro activity + in vivo protection in mouse/hamster models (entry inhibition). **Source:** <https://pmc.ncbi.nlm.nih.gov/articles/PMC8006394/>

Prevention & Prophylactic

- **Prevention:** Seal homes, eliminate food/nesting sites, control rodents. Wet-clean droppings with 10% bleach (never sweep/vacuum). Use N95 + gloves when handling contaminated areas.
- **Prophylactics:** None approved. No vaccine available. Early ribavirin considered only in high-risk HFRS exposures (limited evidence).
- **Speculative:** Bovine lactoferrin shows prophylactic potential (strong in vitro/in vivo protection vs. Seoul hantavirus when given pre-exposure). **Source:** <https://pubmed.ncbi.nlm.nih.gov/11459009/>

Potential Supportive Options (Speculative)

- **Lactoferrin:** Strongest preclinical data; may block viral entry (prophylactic potential).
- **Vitamin D3:** Supports immunity and reduces inflammation in viral respiratory illness.
- **Vitamin C:** Antioxidant; helps immune function and oxidative stress.
- **Zinc:** Immune support; may inhibit viral replication.
- **NAC:** Antioxidant for lungs; reduces oxidative damage and mucus.
- **Melatonin:** Protects lungs, lowers inflammation and oxidative stress.
- **Vitamin K2:** Supports clotting (useful in hemorrhagic HFRS).
- **Resveratrol:** Broad antiviral/anti-inflammatory effects in other RNA viruses.

Herbal Treatment/Therapies (Speculative)

- **Limonin, Quercetin & Curcumin:** In silico docking study identified limonin (strongest), quercetin, and curcumin as top phytochemicals binding hantavirus nucleoproteins (PDB 5E04/5E05); no experimental validation.
 - **Source:** https://www.researchgate.net/publication/362538996_In_Silico_Phytochemical_Screening_for_Hantavirus
- **Oregano & Thyme oils (carvacrol/thymol):** Strongest envelope-disrupting potential; diffuse or steam inhale.
- **Clove oil (eugenol):** Virucidal envelope activity; use in low dilution.
- **Eucalyptus & Tea Tree:** Respiratory support and airborne antiviral effects; best via ultrasonic diffuser or nebulizer (5–10 min sessions).
- **Method:** Diffuse diluted (3-7 drops in water) or steam inhale (1-3 drops in water). Never ingest or apply undiluted. **Note:** Speculative for hantavirus; may help symptoms but unproven. Use high-quality oils and test tolerance.